CLAIMS

1. A protein consisting of an amino acid sequence represented by SEQ ID NO:1, or a salt thereof.

2. A protein having an amino acid sequence derived from an amino acid sequence represented by SEQ ID NO: 2 by deletion of 0 to 10 amino acid residues from the N-terminal and deletion of 0 to 10 amino acid residues from the C-terminal and having 120 to 139 amino acid residues, or a salt thereof.

3. A protein consisting of an amino acid sequence derived from an amino acid sequence of a protein represented by SEQ ID NO: 1 or 2 and having deletion, substitution or addition of one or several amino acids and having a function substantially identical with that of the protein according to claim 1 or 2, or a salt thereof.

4. A polynucleotide containing a polynucleotide encoding the amino acid sequence of a protein according to any one of claims 1 to 3.

5. The polynucleotide according to claim 4, containing a nucleotide sequence represented by SEQ ID NO: 3 or 4.

6. An expression system containing a polynucleotide according to claim 4 or 5.

7. A recombinant vector containing a polynucleotide according to claim 4 or 5.

8. A transformant which is transformed with a polynucleotide according to claim 4 or 5.

9. An antibody against a protein according to any one of claims 1 to 3 and/or a salt thereof.

10. A pharmaceutical agent containing an antibody according to claim 9.

11. A method for producing a protein or a salt thereof according to any one of claims 1 to 3, comprising the steps of culturing the transformant of claim 8 and producing the protein.

12. A method for producing a protein or a salt thereof according to any one of claims 1 to 3, characterized by using a cell-free protein synthesis system.

13. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 3 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 3, comprising the steps of bringing a candidate substance into contact with the protein or a salt thereof according to any one of claims 1 to 3; and confirming whether the candidate substance interacts with the protein or a salt thereof.

14. A method for assaying a protein or a salt thereof according to any one of claims 1 to 3 using an antibody of claim 9.

15. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 3, using an assay method of claim 14.

16. A method for specifying a gene associated with a protein according to any one of claims 1 to 3, comprising the steps of expressing the protein according to any one of claims 1 to 3 in a cell; and examining an expression status of the gene in the cell.

17. A method for screening a compound interacting with a protein or a salt thereof according to any one of claims 1 to 3 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 3, comprising steps of determining an active site of the protein using information concerning a three-dimensional structure of the protein according to any one of claims 1 to 3; and searching a compound interacting with the active site on a computer.

18. The screening method according to claim 17, wherein the information concerning a three-dimensional structure of the protein is three-dimensional structure information of a protein comprising amino acid residues from amino acid 8 to amino

acid 126 among three-dimensional structure information described in any one of three-dimensional structure coordinate tables 1 to 20.

19. The screening method according to claim 17, wherein, among three-dimensional structure information described in three-dimensional structure coordinate table 1, a part of information corresponding to amino acid residues of ASN15, ASN17, PHE18, THR19, LEU67, ARG70, SER71, VAL72, SER73, ASN74, HIS78, GLY80, ASP82, ASP119, SER122, ASP126, SER127 is used.

20. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 3 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 3, comprising the steps of preparing specified compound interacting with the active site as a candidate substance by a screening method according to any one of claims 17 to 19, and bringing the candidate substance into contact with a protein or a salt thereof according to any one of claims 1 to 3; and confirming whether the candidate substance has interaction with the protein or a salt thereof.

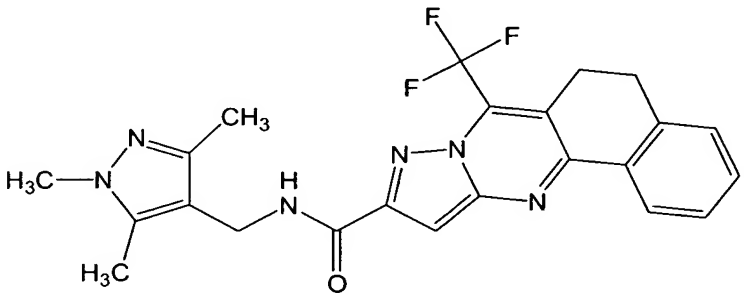
21. A method for presuming a three-dimensional structure of a protein with an unknown structure, wherein homology modeling is conducted on the protein with an unknown structure comprising an amino acid sequence having 30% or more homology with an amino acid sequence of a protein according to any one of claims 1 to 3, by using information concerning three-dimensional structure information of a protein having amino acid residues from amino acid 8 to amino acid 126 among three-dimensional structures of a protein described in any one of three-dimensional structure coordinate tables 1 to 20.

22. A compound inhibiting cellular proliferation activity, characterized in that the compound is obtained by a method according to any one of claims 13, 15, and 17 to 20.

23. A cellular proliferation activity inhibitor comprising, as an active ingredient, at least one compound selected from the group consisting of the following compounds i):

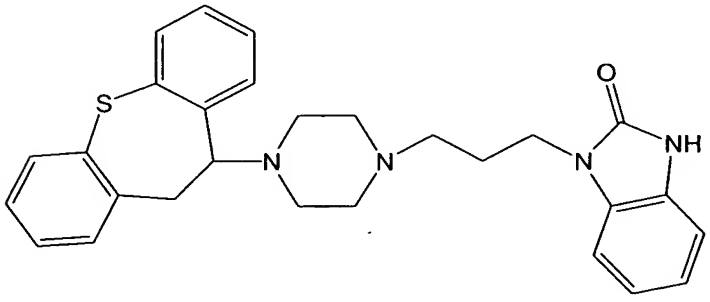
i) Compounds represented by items (a) to (e), or a salt thereof:

(a) N-(1,3,5-trimethyl-1H-pyrazol-4-ylmethyl)-7-trifluoromethyl-5,6-dihydro-7a,8,11-triazacyclopenta[b]phenanthrene-9-carboxamide represented by the following structural formula (I):



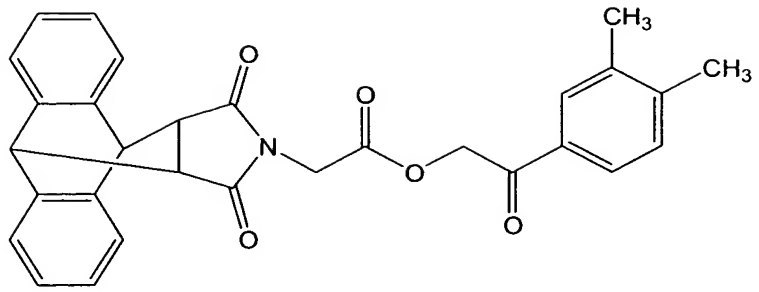
(I),

(b) 1-[3-[4-(10,11-dihydro-dibenzo[b,f]thiepin-10-yl) piperazin-1-yl]propyl]-1,3-dihydrobenzimidazol-2-one represented by the following structural formula (II):



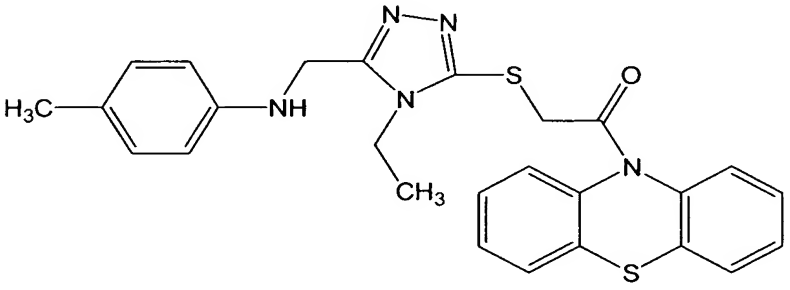
(II),

(c) 2-(3,4-dimethylphenyl)-2-oxoethyl-2-(3,5-dioxo-4-aza-dibenzo [8,9,10,11]tricyclo[5,2,2,$0^{2,6}$]undecan-4-yl)acetate represented by the following structural formula (III):



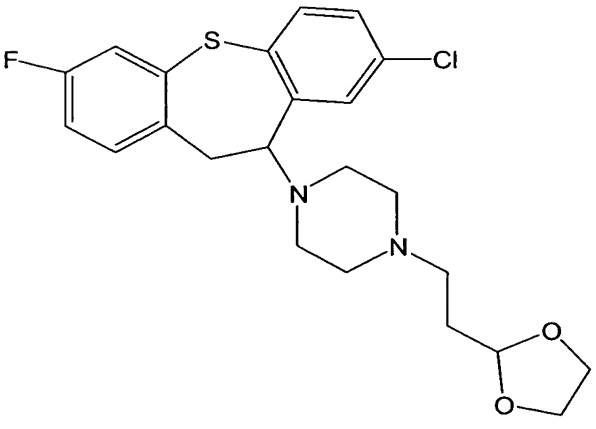
(III),

(d) 2-[4-ethyl-5-(4-methylphenylamino)methyl-4H-[1,2,4]triazol-3-yl] sulfanyl-1-(phenothiazin-10-yl)-1-ethanone represented by the following structural formula (IV):



(IV), or

(e) 1-(8-chloro-3-fluoro-10,11-dihydro-dibenzo[b,f]thiepin-10-yl)-4-[2-(1,3-dioxolan-2-yl)ethyl] piperazine represented by the following structural formula (V):



(V)

24. The cellular proliferation activity inhibitor according to claim 23 for inhibiting proliferation activity of a cancer cell derived from an ovarian cancer cell.

25. A method for producing a pharmaceutical composition containing a compound of inhibiting a cellular proliferation activity, characterized in that the method comprises a step of blending a compound obtained by a method according to any one of claims 13, 15, and 17 to 20 with a pharmaceutically acceptable carrier.